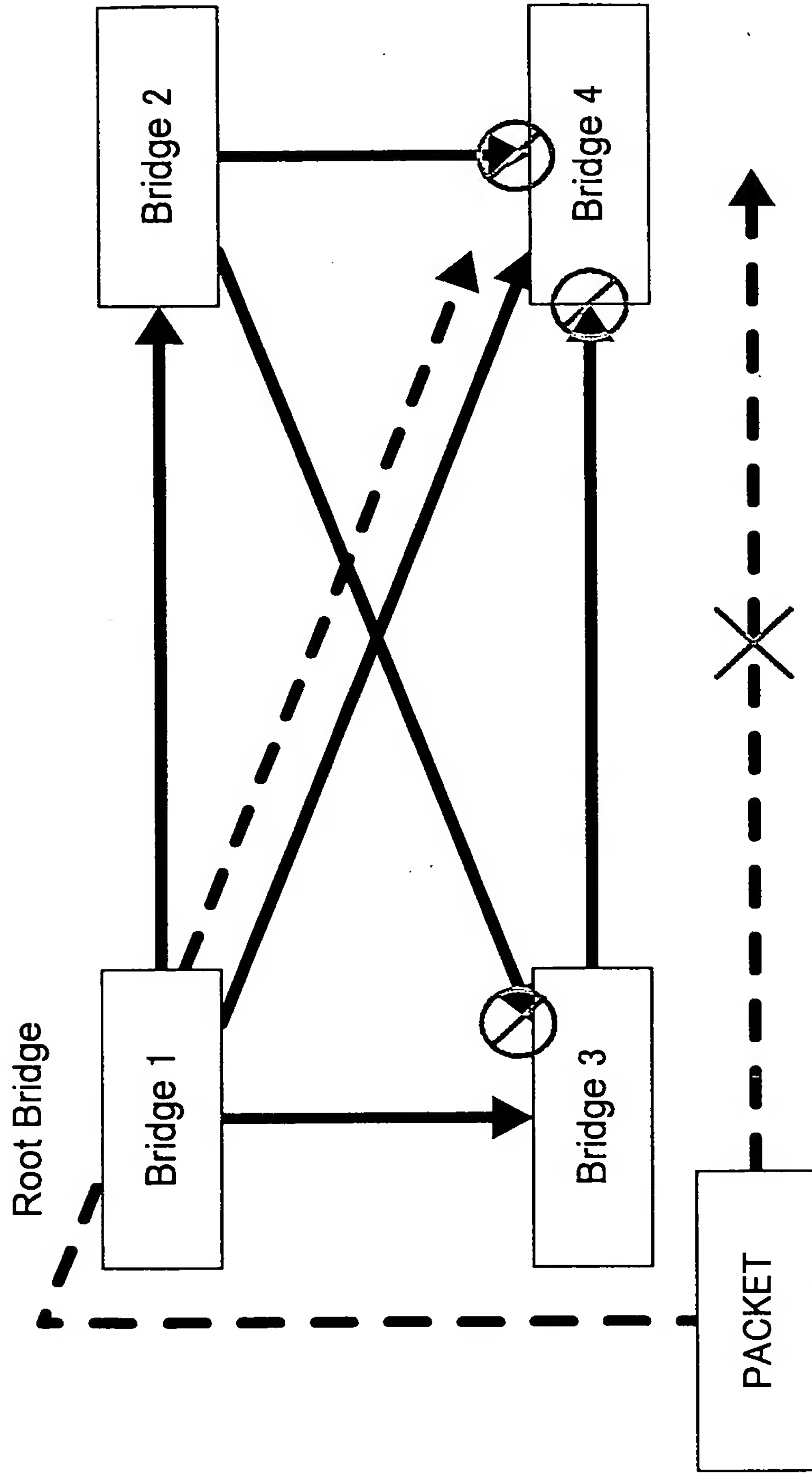
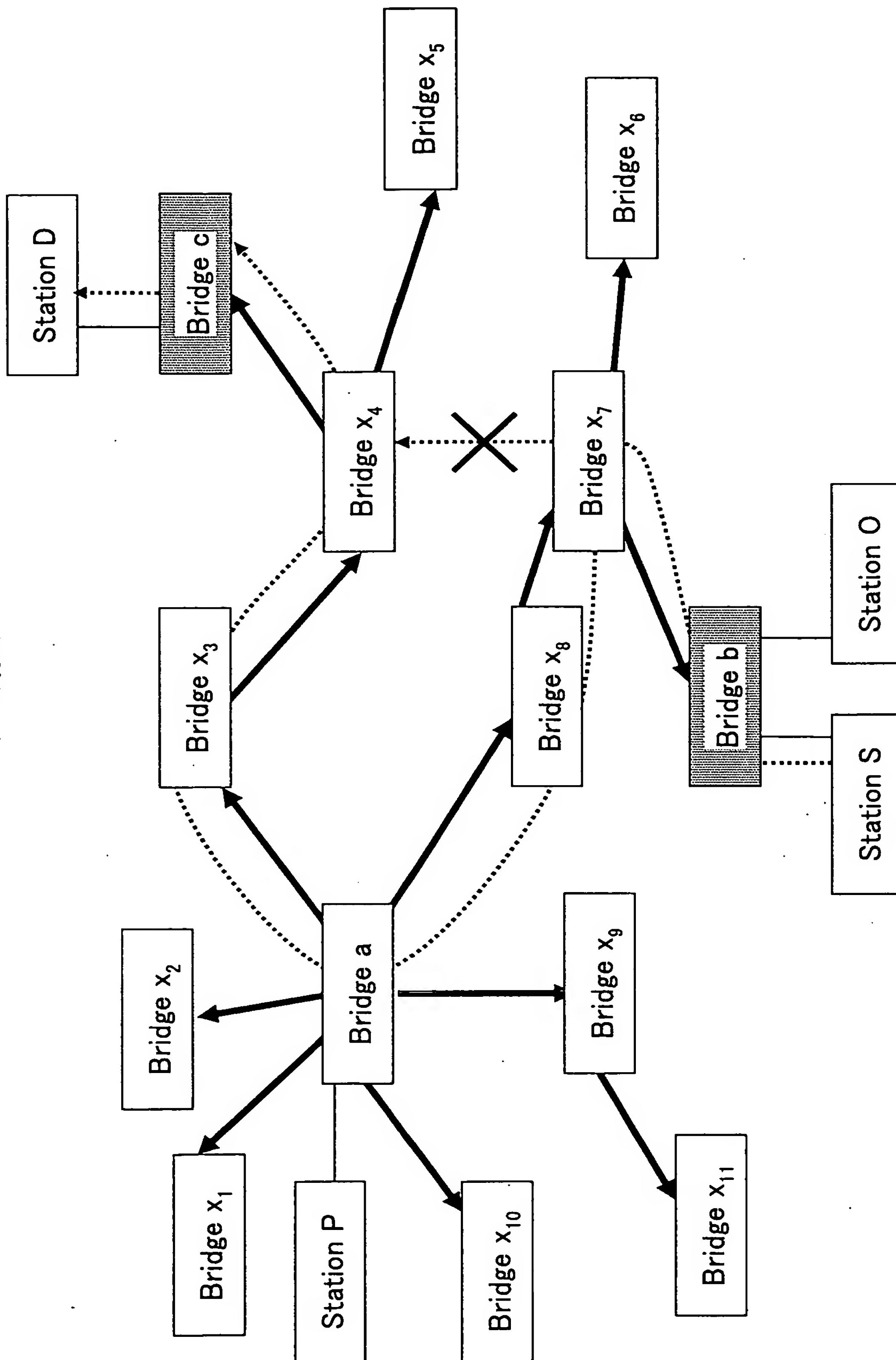


FIG.1



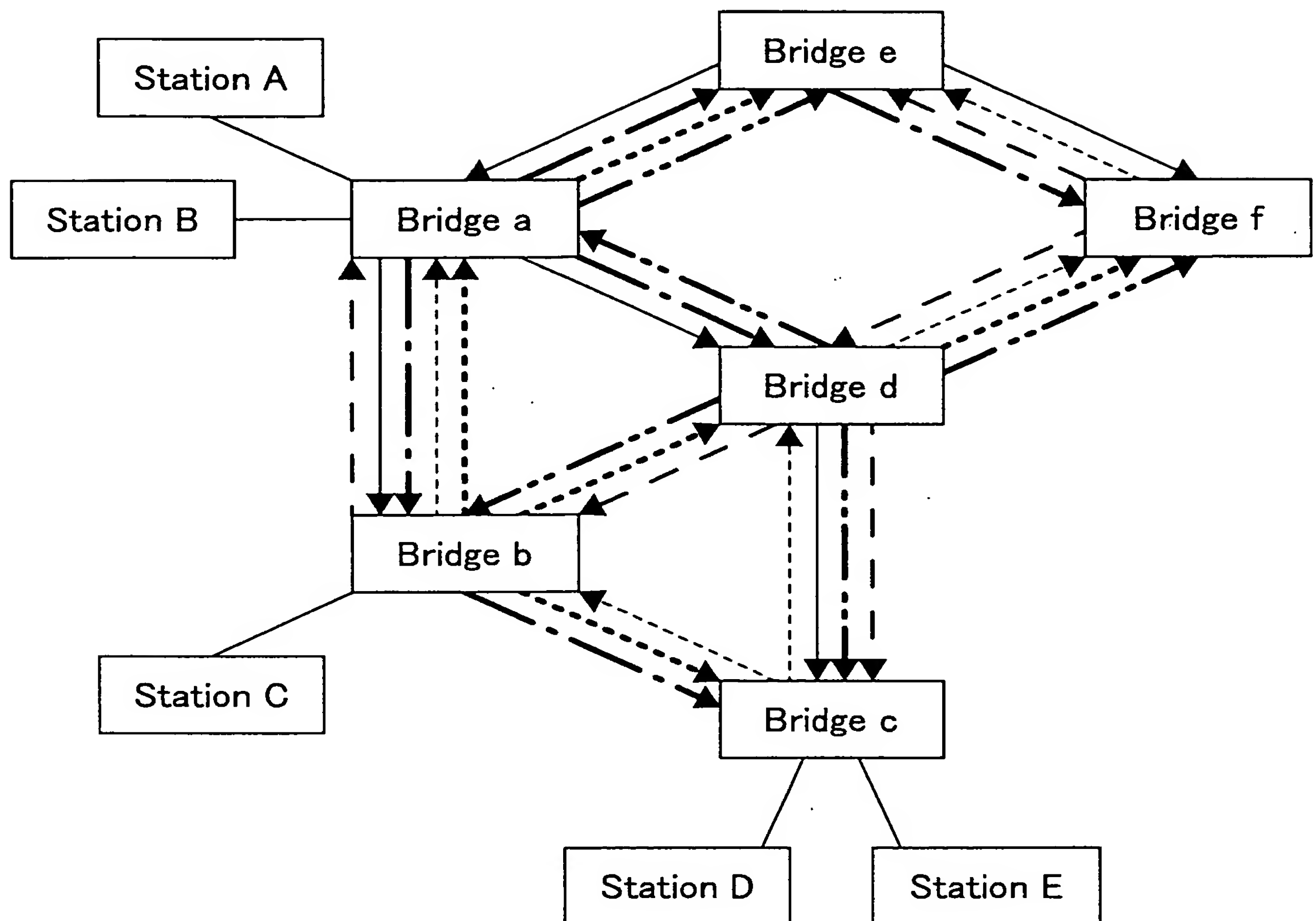
PRIOR ART

**FIG. 2**



# PRIOR ART

FIG.3



Bridge a	—————▶
Bridge b	- - - - -▶
Bridge c	· · · · ·▶
Bridge d	—————▶
Bridge e	—————▶
Bridge f	- - - - -▶

FIG.4

ROOT BRIDGE	TREE ID	PREVIOUS NODE	NEXT NODE
Bridge a	Tree A	Bridge a	—
Bridge b	Tree B	Bridge b	Bridge f
Bridge c	Tree C	Bridge c	Bridge f
Bridge d	Tree D	—	Bridge a Bridge b Bridge c Bridge f
Bridge e	Tree E	Bridge a	Bridge c
Bridge f	Tree F	Bridge f	Bridge b Bridge c

FIG.5

STA→BRD		From DS	ADDRESS 1	ADDRESS 2	ADDRESS 3	ADDRESS 4
	1	0	ADDRESS OF RECEIVING NODE	SOURCE ADDRESS	DESTINATION ADDRESS	RESERVED
BETWEEN BRDs			ADDRESS OF RECEIVING NODE	ADDRESS OF TRANSMITTING NODE	DESTINATION ADDRESS	SOURCE ADDRESS
	1	1	ADDRESS OF RECEIVING NODE	ADDRESS OF TRANSMITTING NODE	SOURCE ADDRESS	RESERVED
BRD→STA			ADDRESS OF RECEIVING NODE	ADDRESS OF TRANSMITTING NODE	SOURCE ADDRESS	RESERVED
	0	1	ADDRESS OF RECEIVING NODE	ADDRESS OF TRANSMITTING NODE	SOURCE ADDRESS	RESERVED

FIG.6

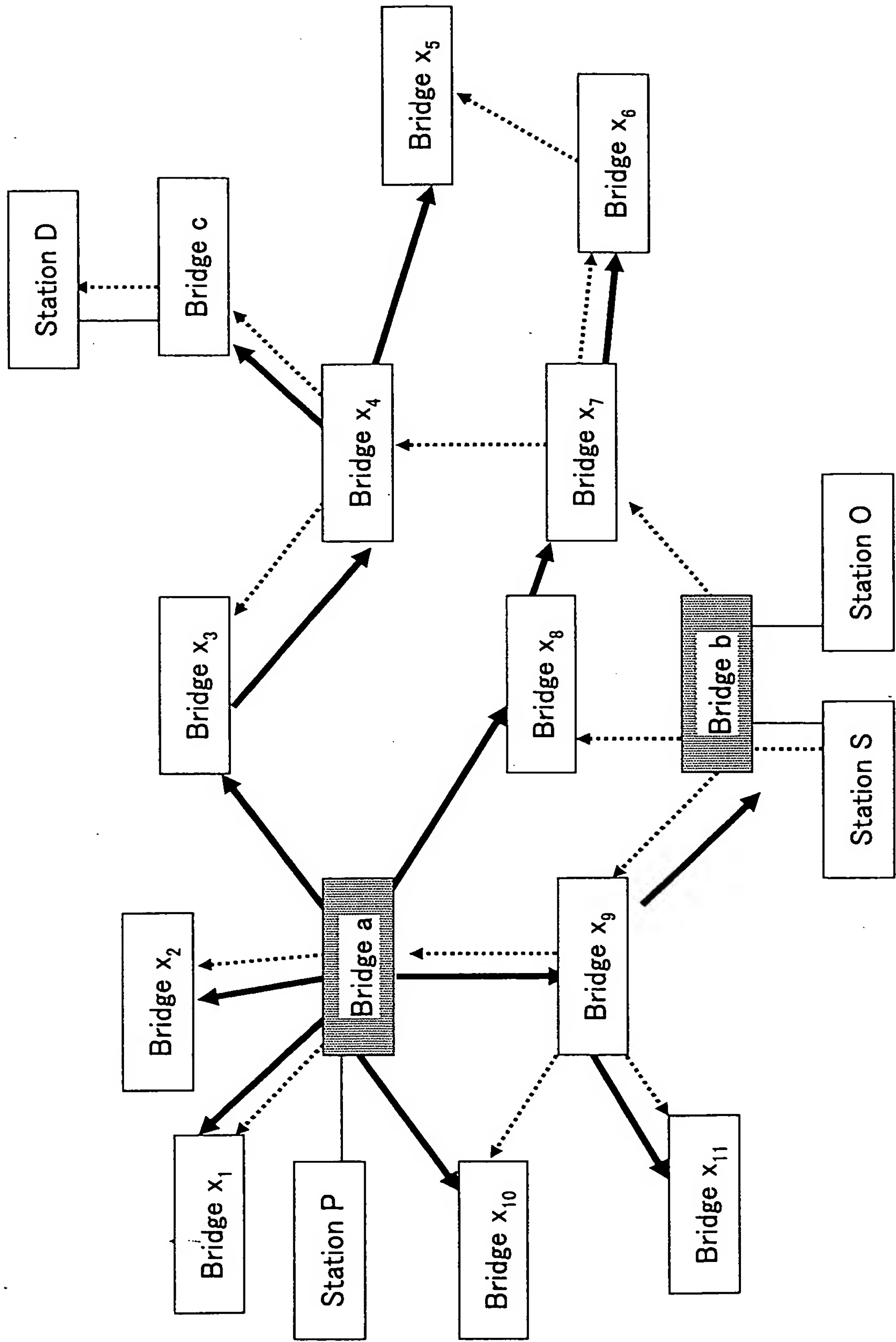


FIG.7

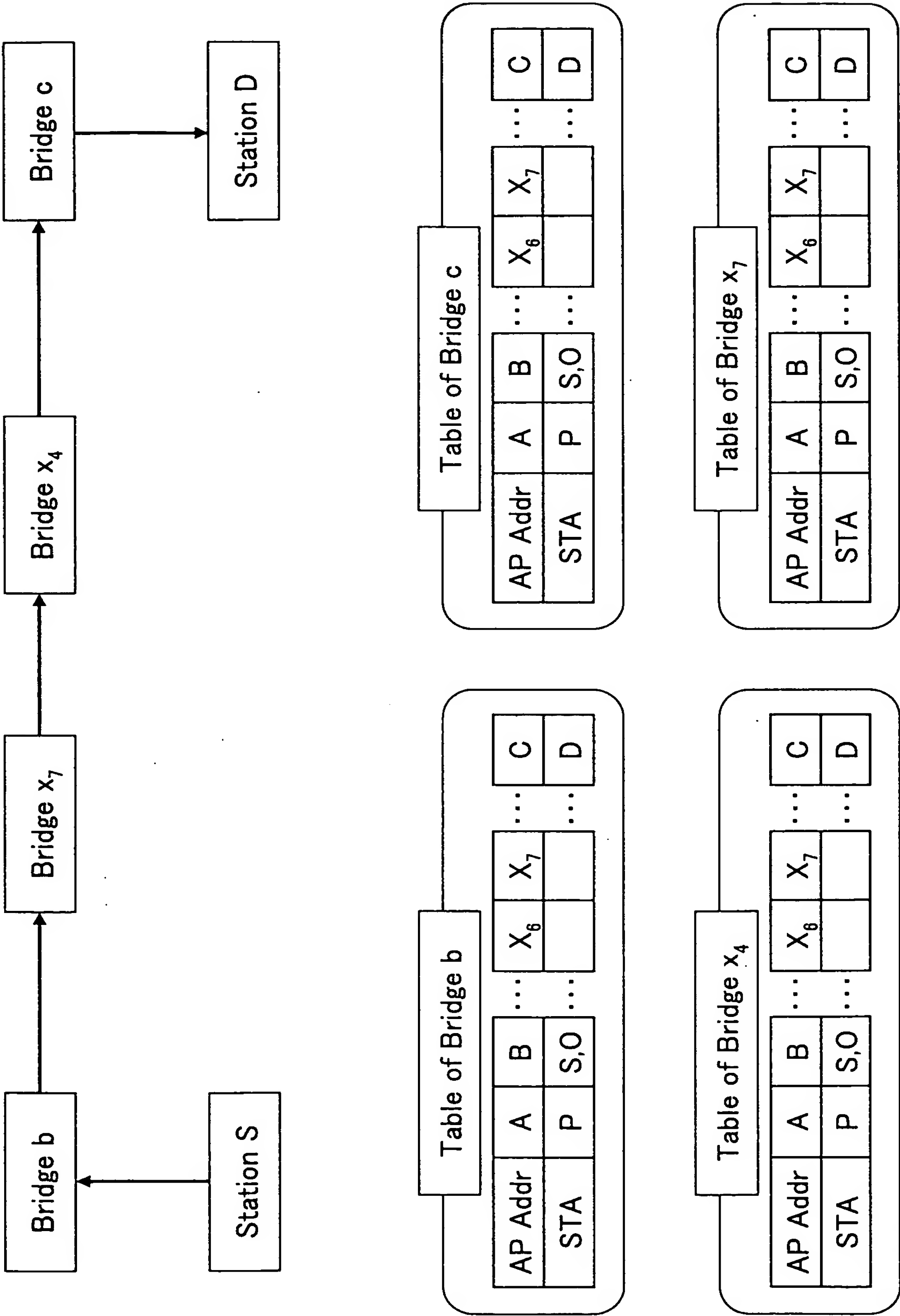


FIG.8

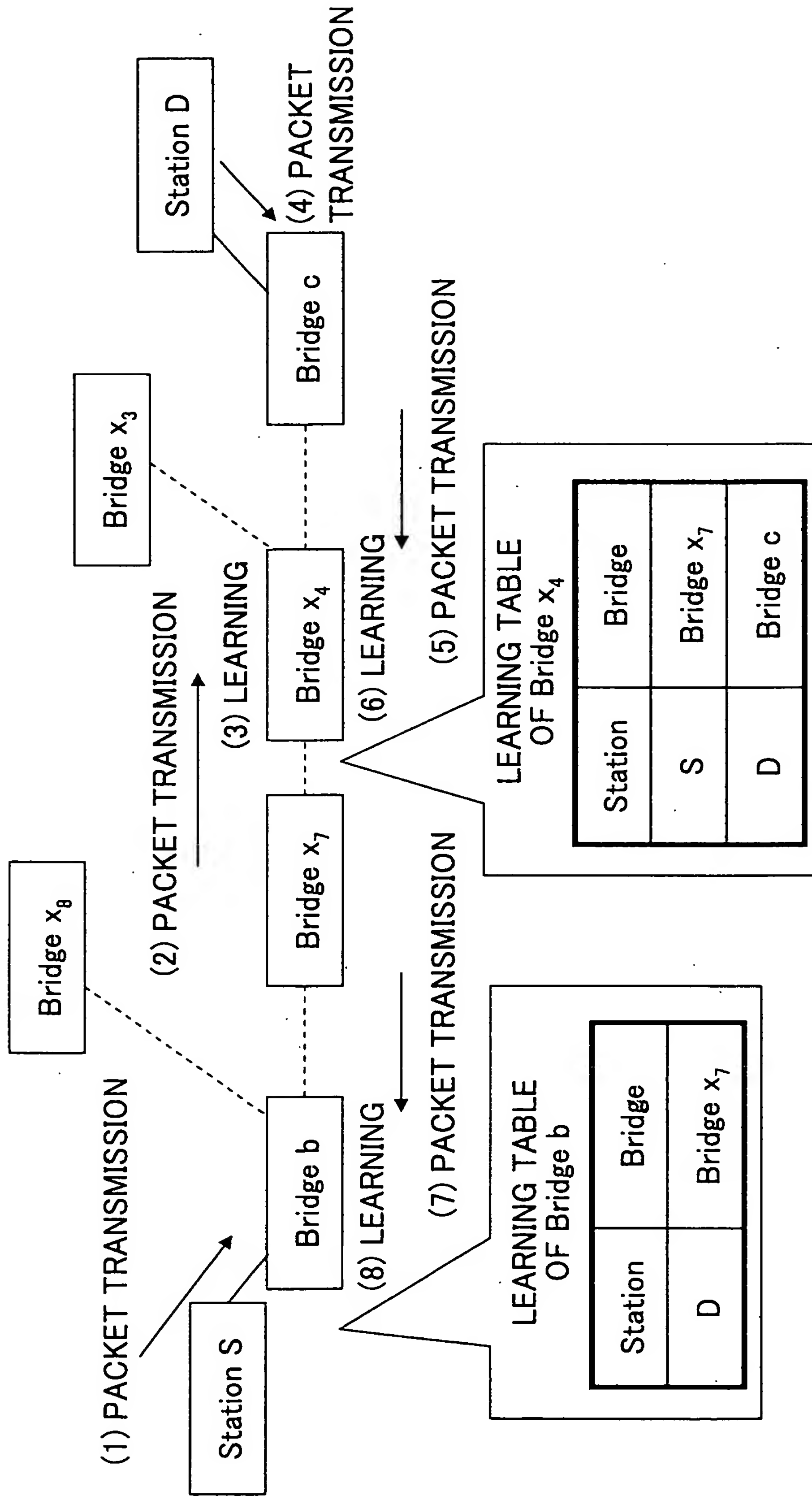




FIG.9A

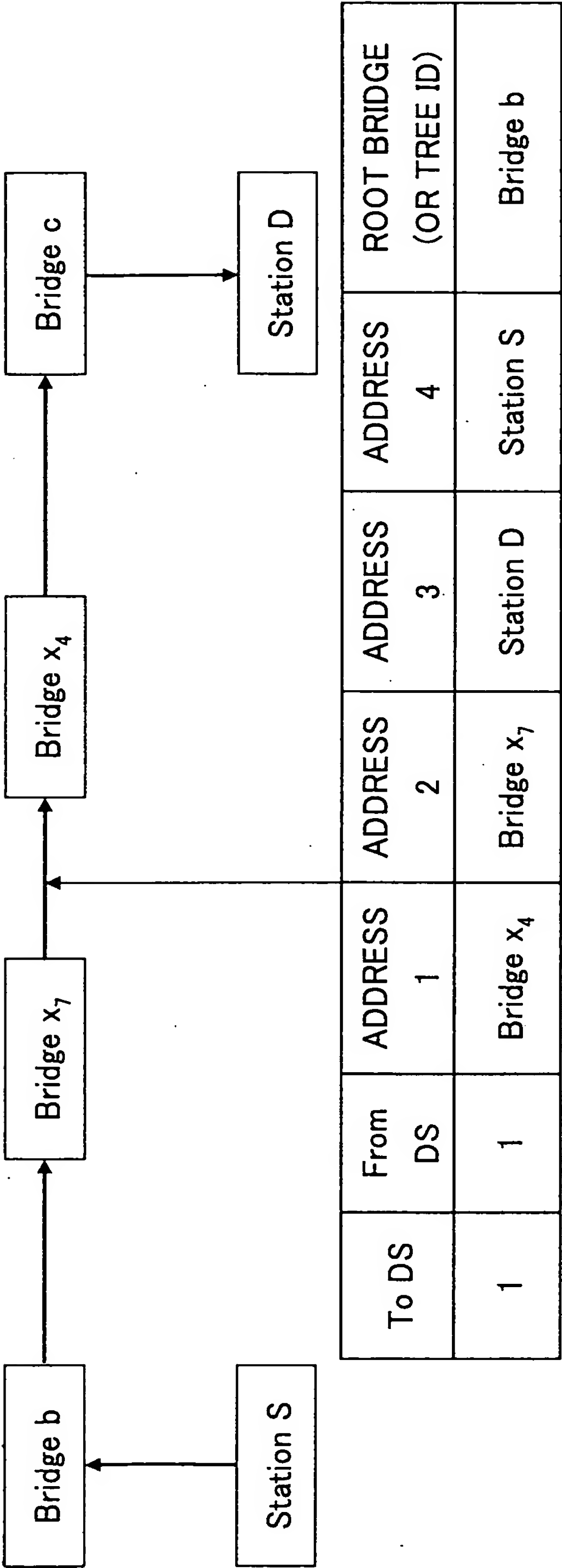


FIG.9B

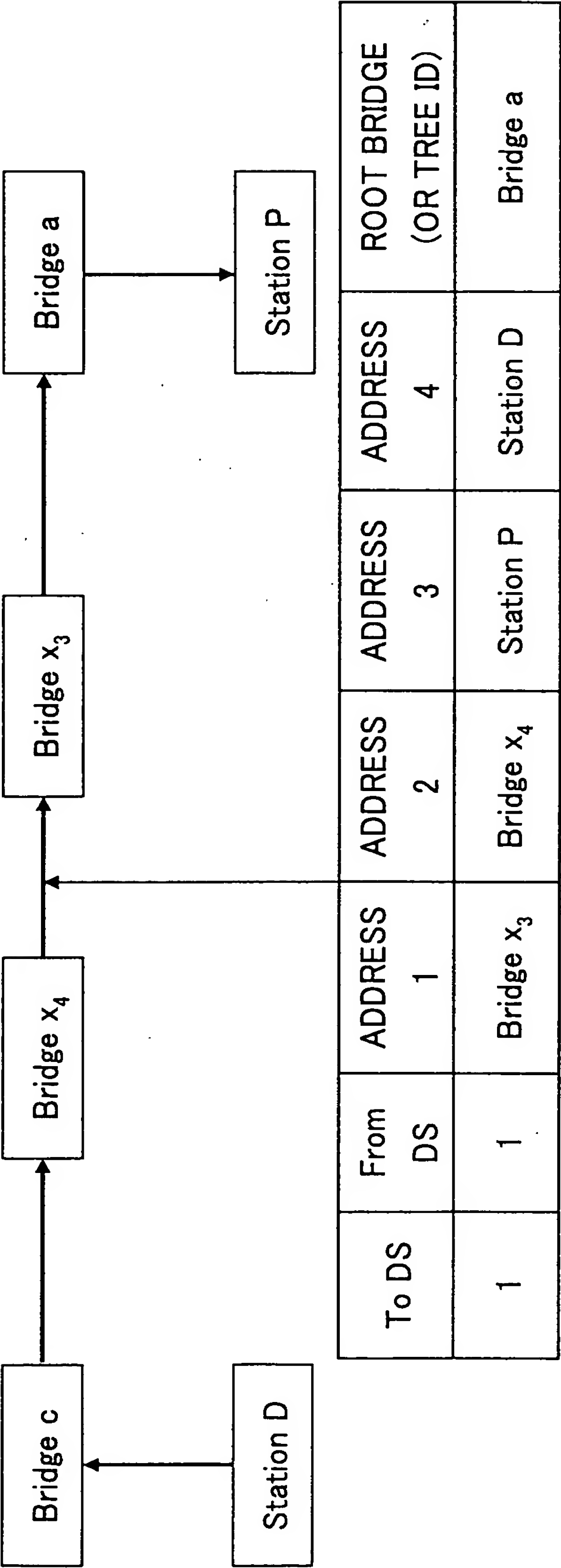


FIG.10A

Bridge	Signal	Queue size	Error Rate
a	-15dbm	30k[bit]	$10^{-6}$
b	-30dbm	65k[bit]	$10^{-5}$
c	-48dbm	12k[bit]	$10^{-8}$
e	-65dbm	240k[bit]	$10^{-3}$

FIG.10B

Bandwidth (Mbps)	link cost
10	2,000,000
100	200,000
1000	20,000
10,000,000	2

FIG.11

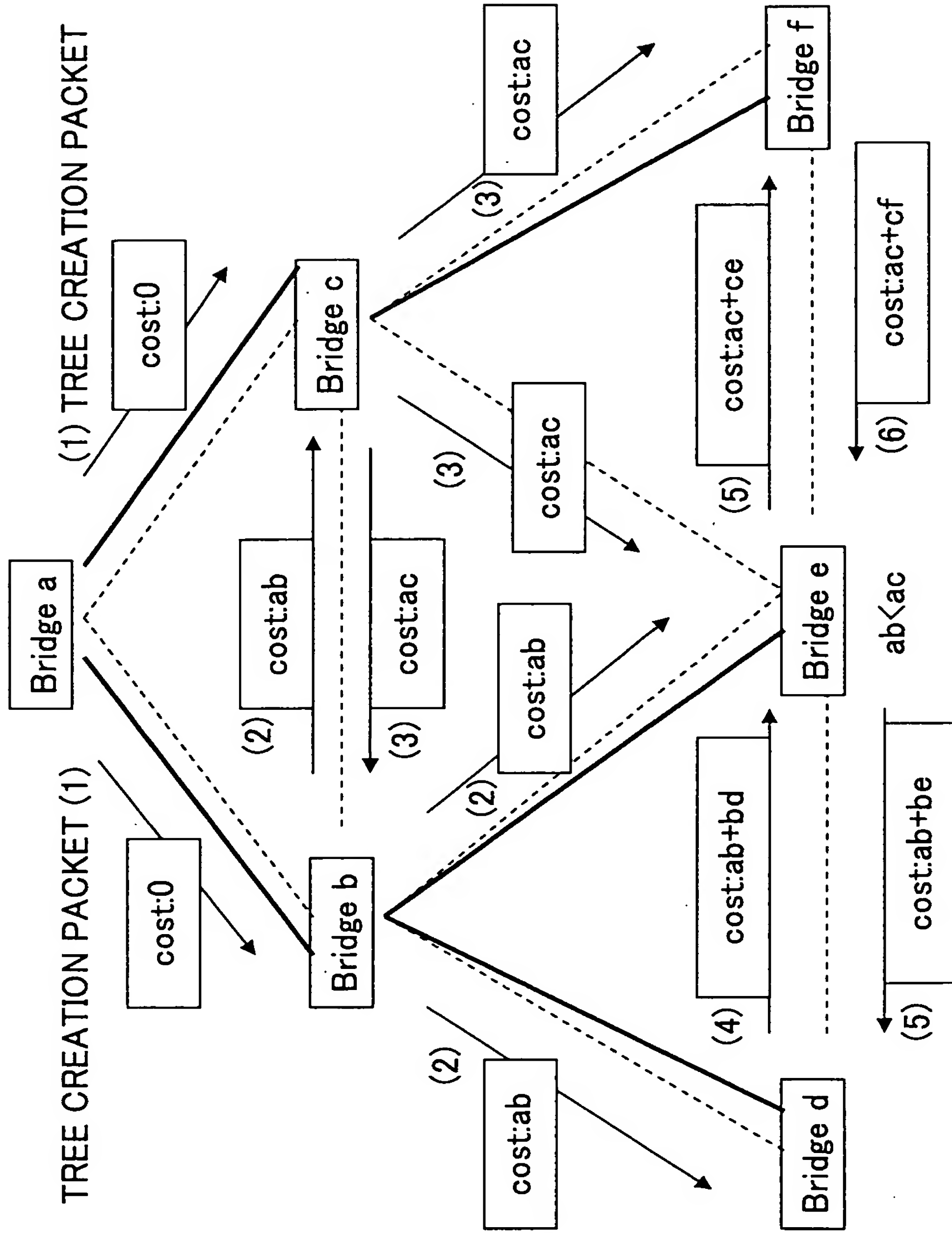


FIG.12A

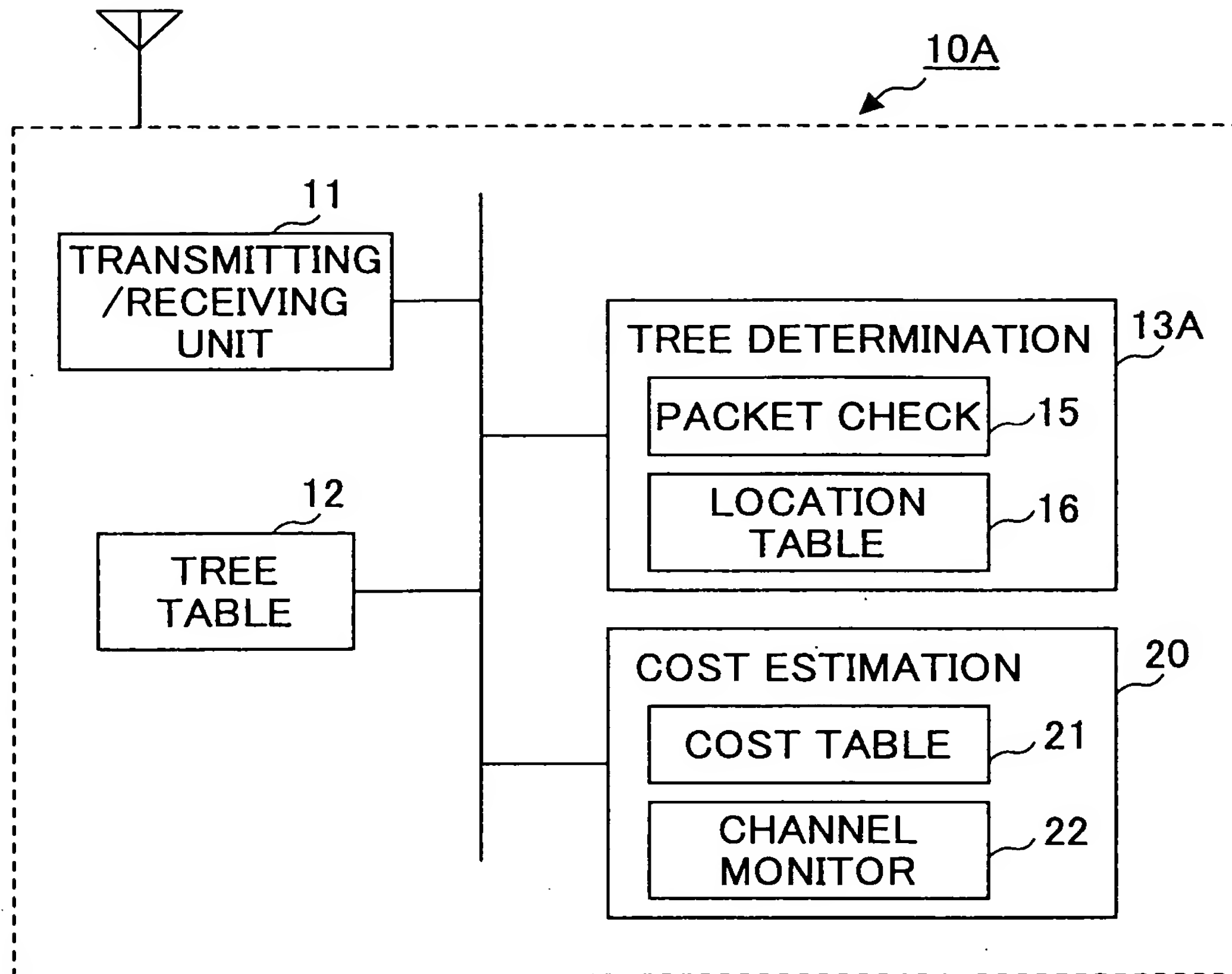
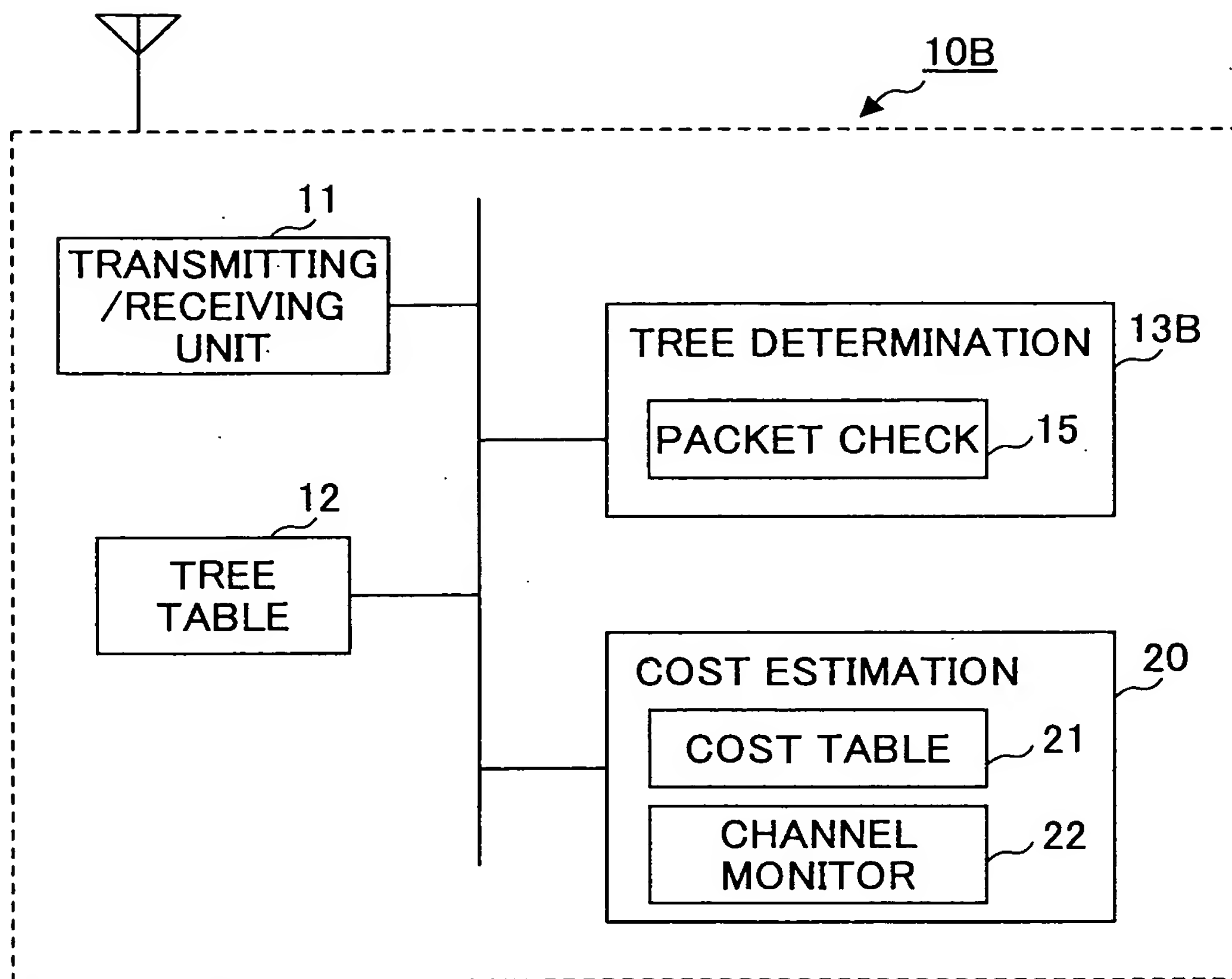


FIG. 12B



**FIG. 13**

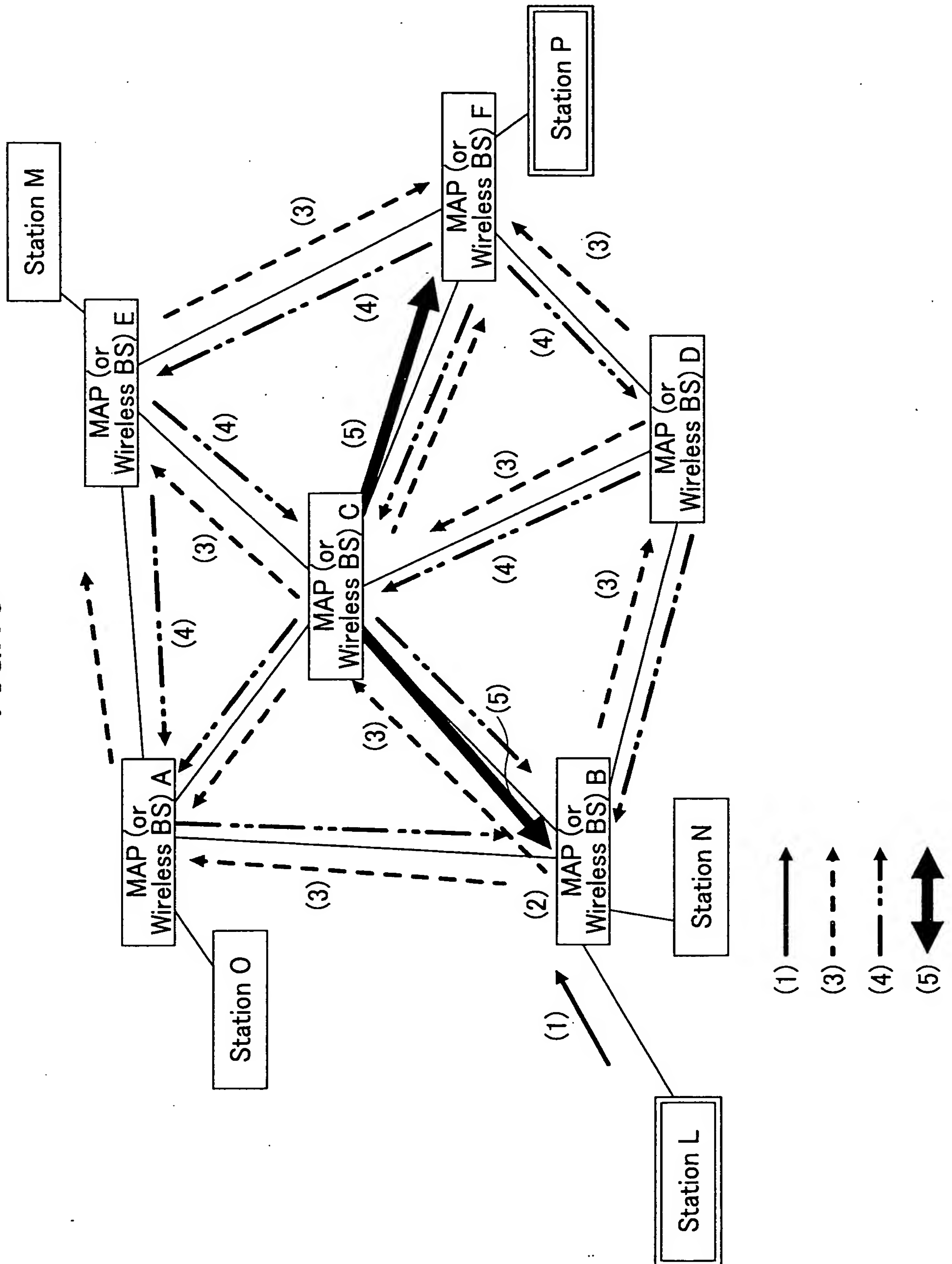


FIG.14A

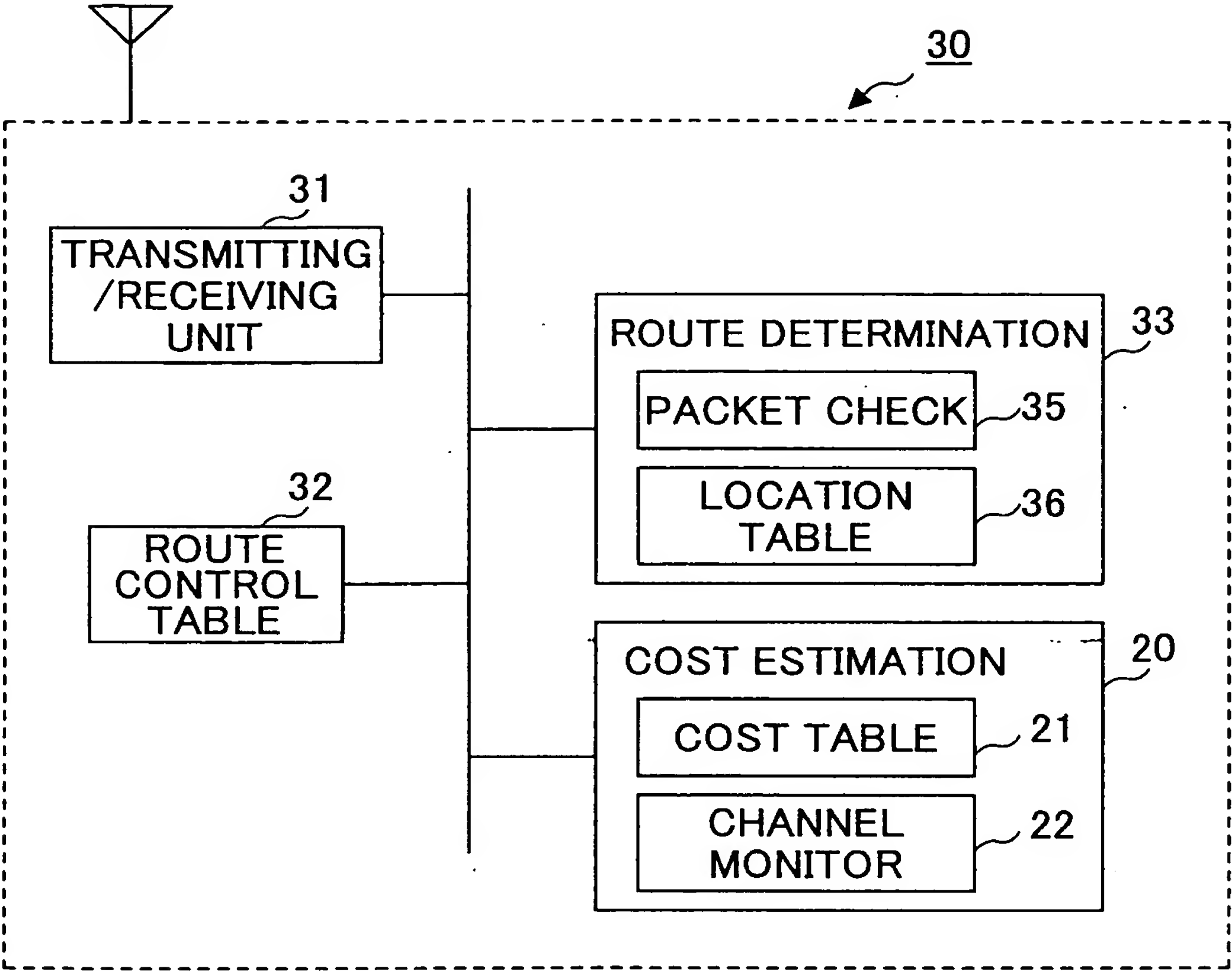


FIG.14B

TARGET BS (ON THE DESTINATION SIDE)	NEXT HOP
A	A
C	C
D	D
E	A
F	C



FIG.15

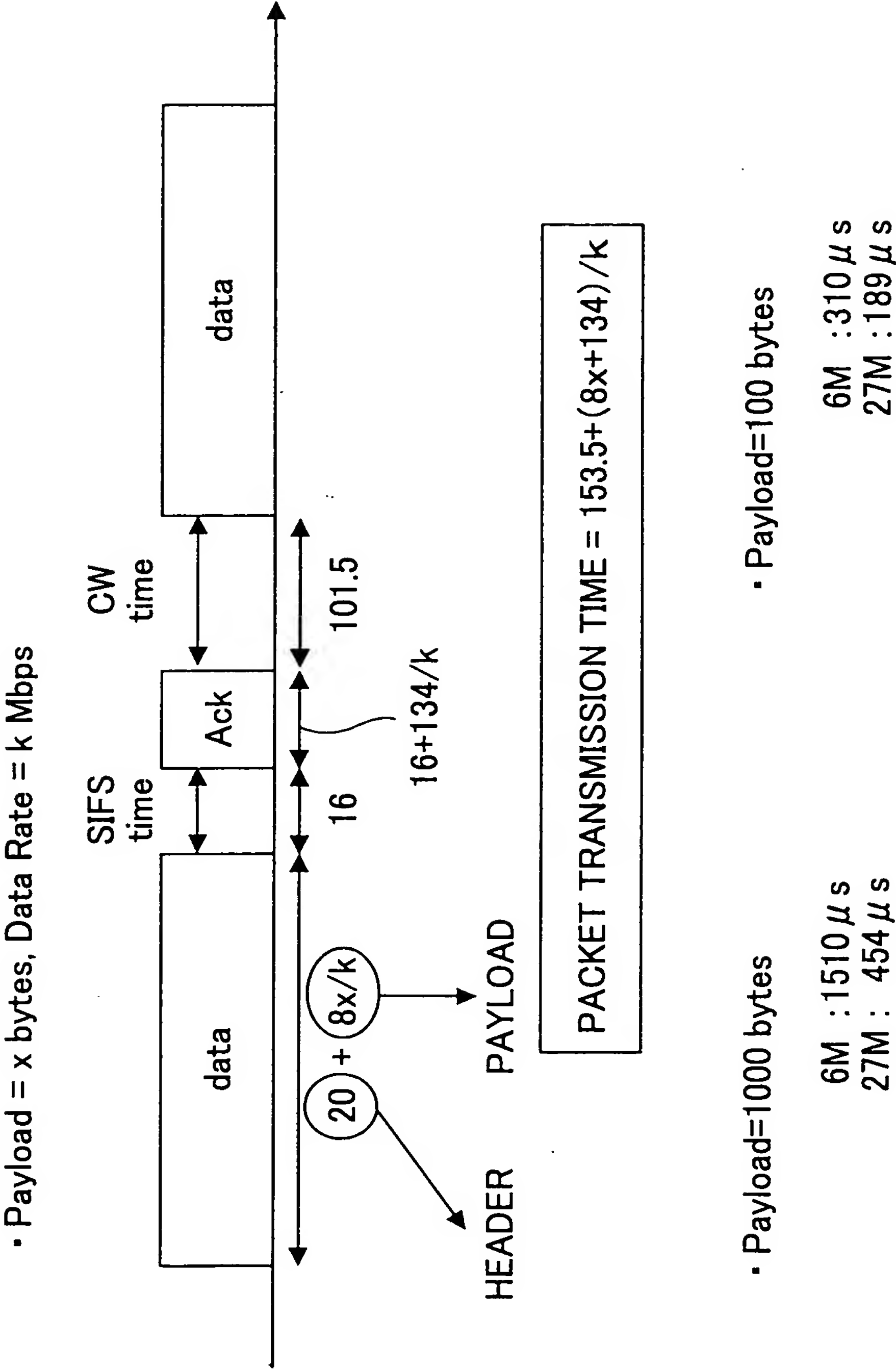
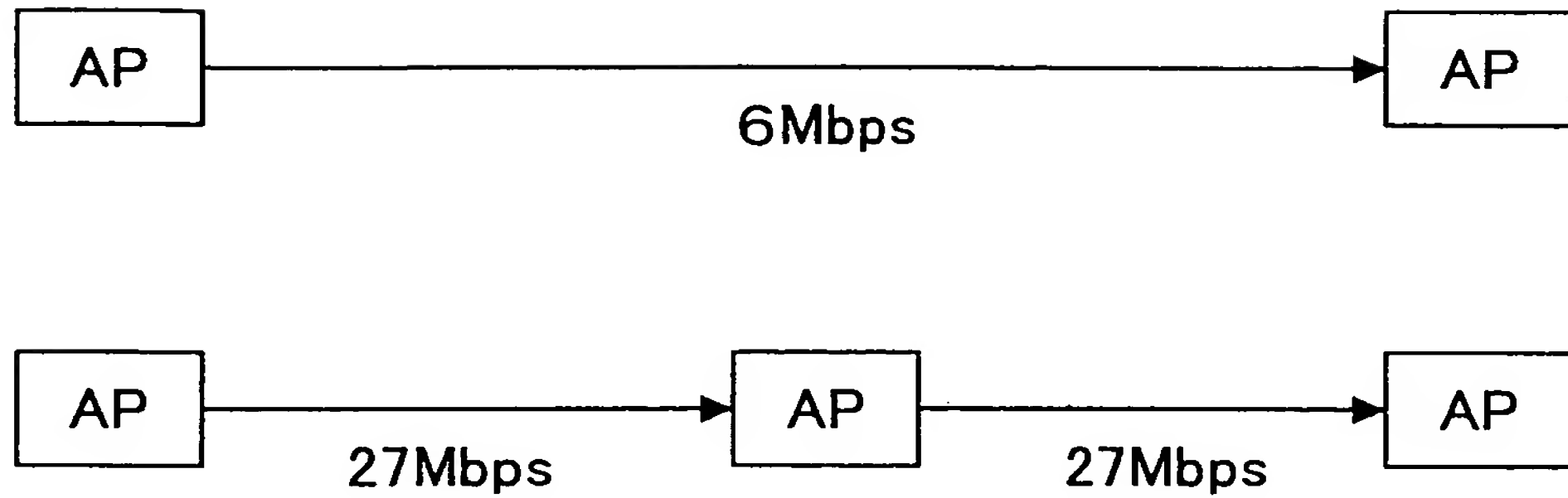


FIG.16



- Payload=1000 bytes

1 hop : $1510 \times 1 = 1510 \mu s$	→	5.3Mbps
2 hops: $454 \times 2 = 908 \mu s$		8.6Mbps

- Payload=100 bytes

1 hop : $310 \times 1 = 310 \mu s$	→	2.6Mbps
2 hops: $189 \times 2 = 378 \mu s$		1.9Mbps

OPTIMUM ROUTE VARIES DEPENDING ON PAYLOAD SIZE

FIG.17

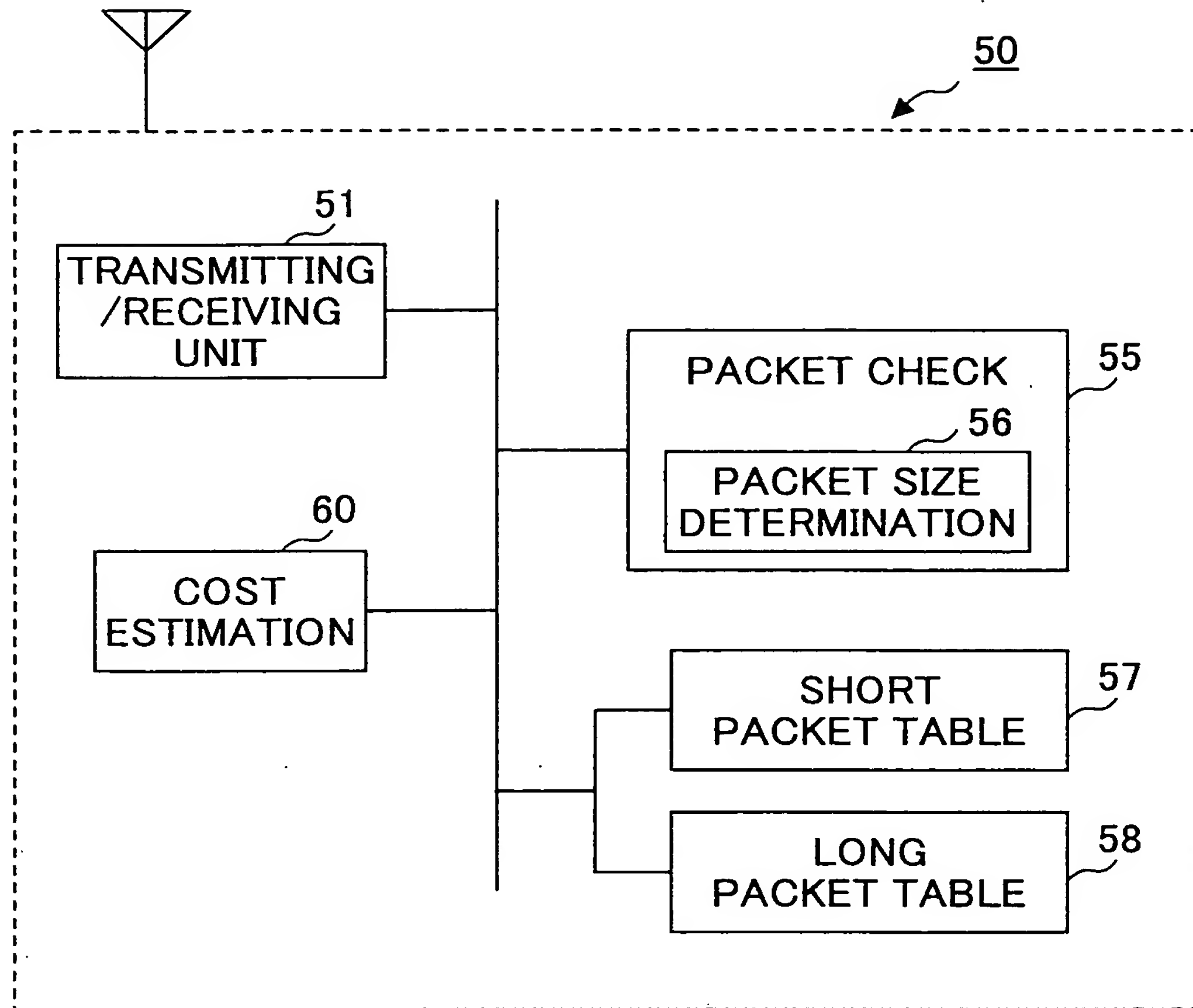


FIG.18

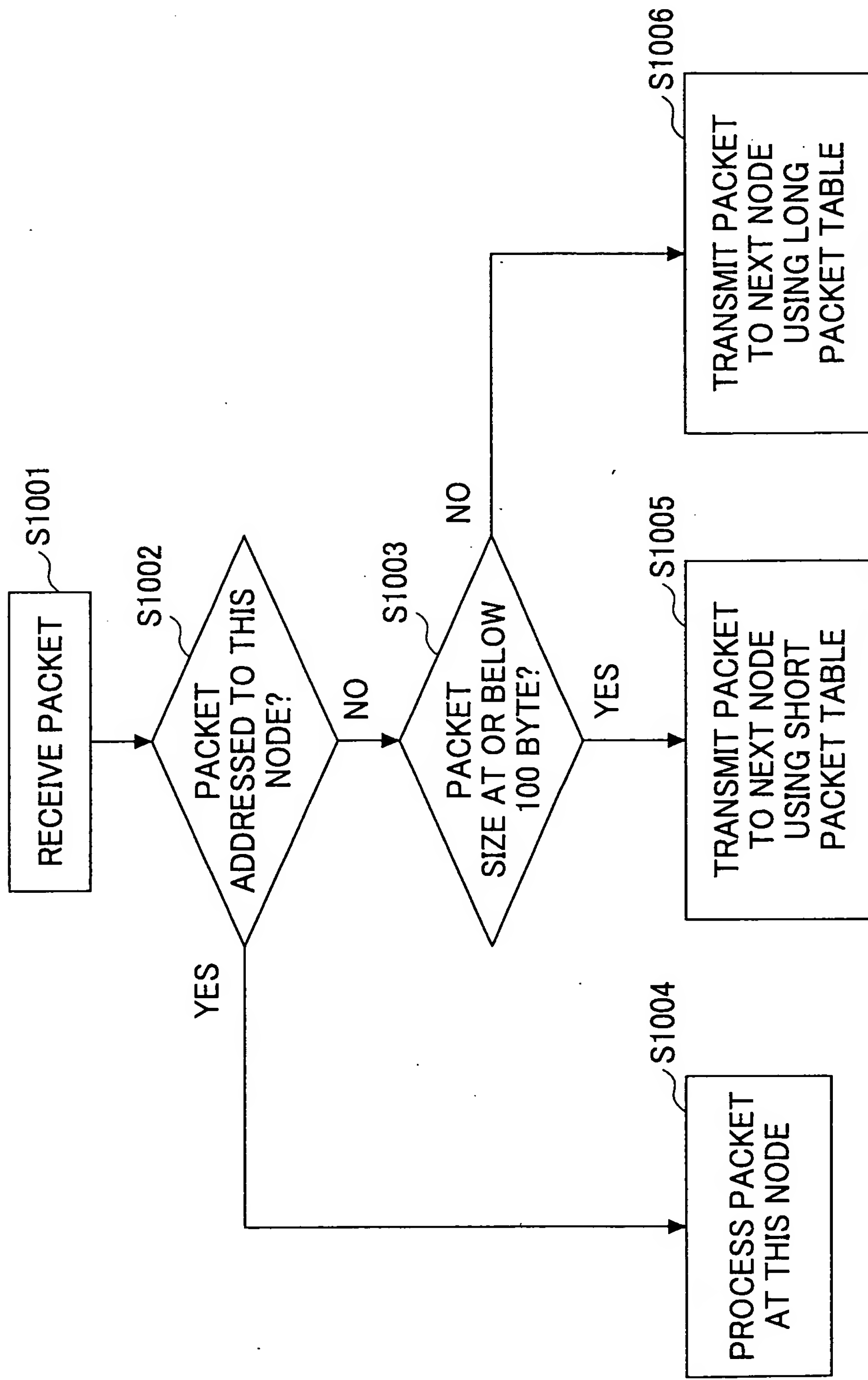


FIG.19

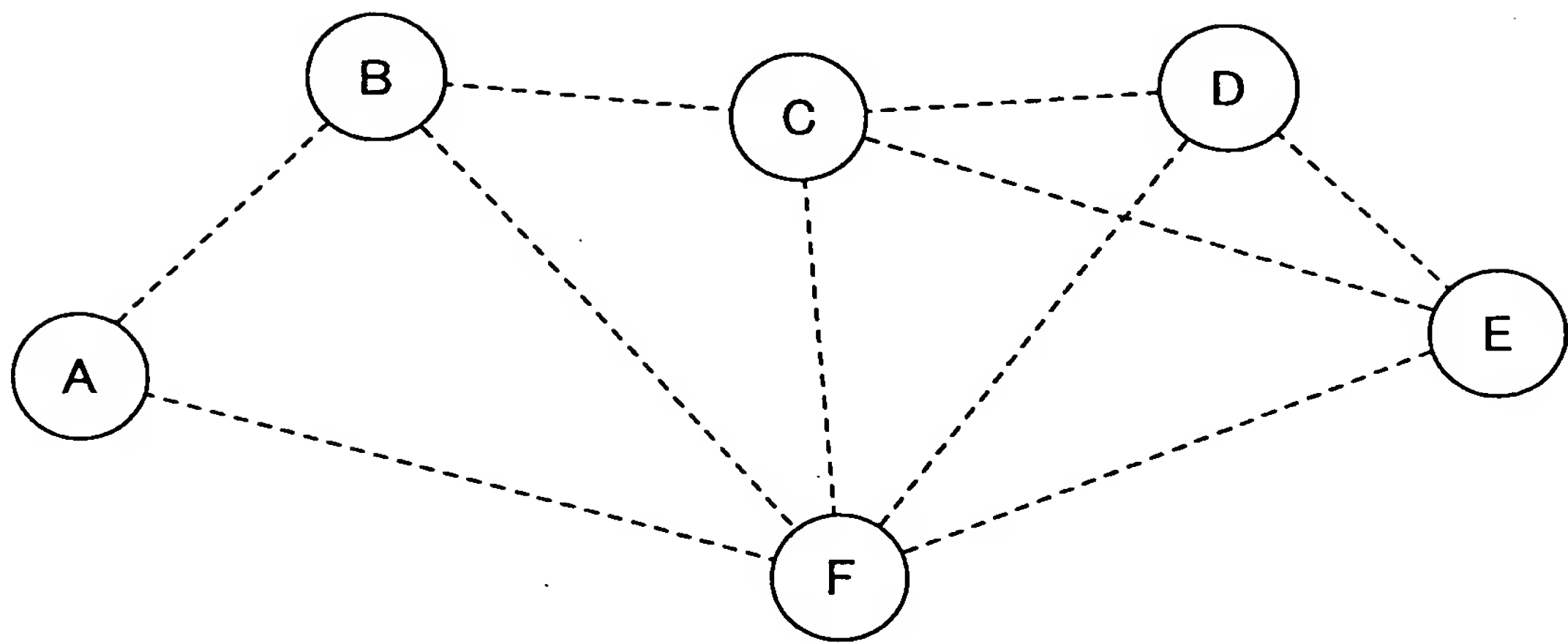


FIG.20A

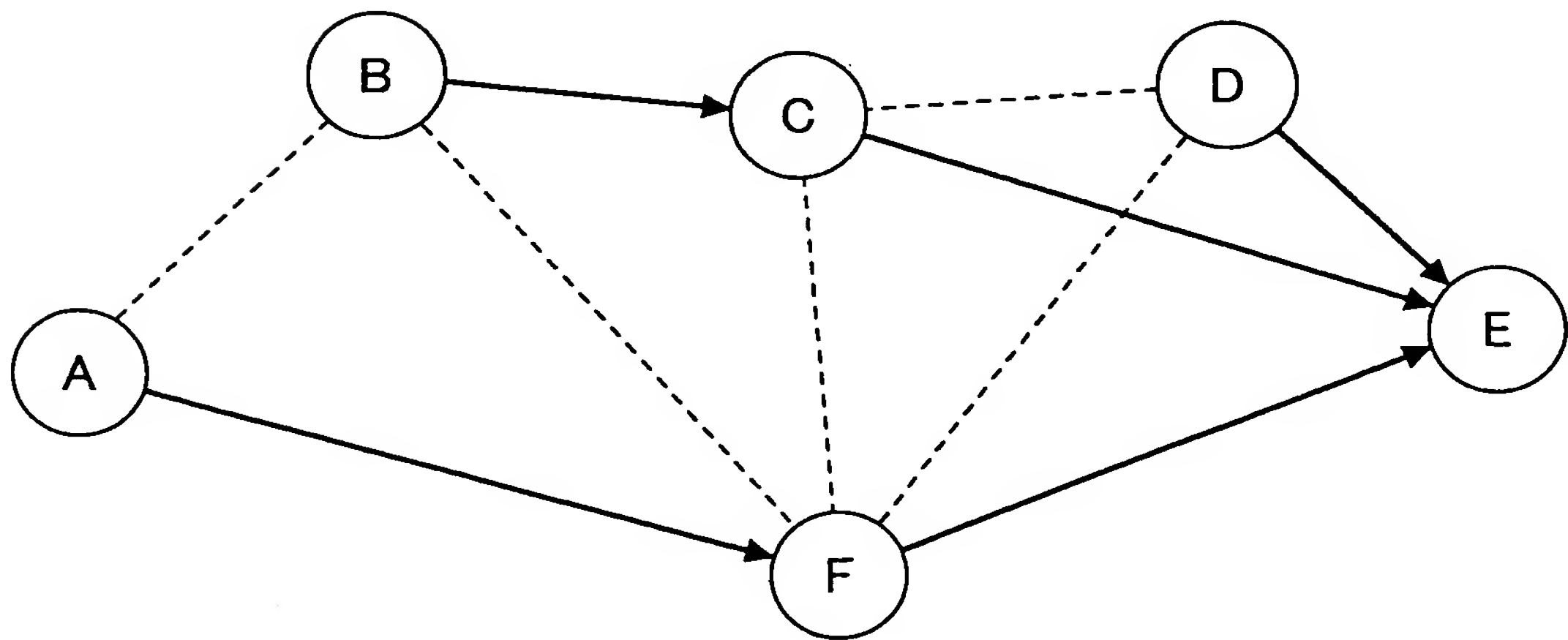


FIG.20B

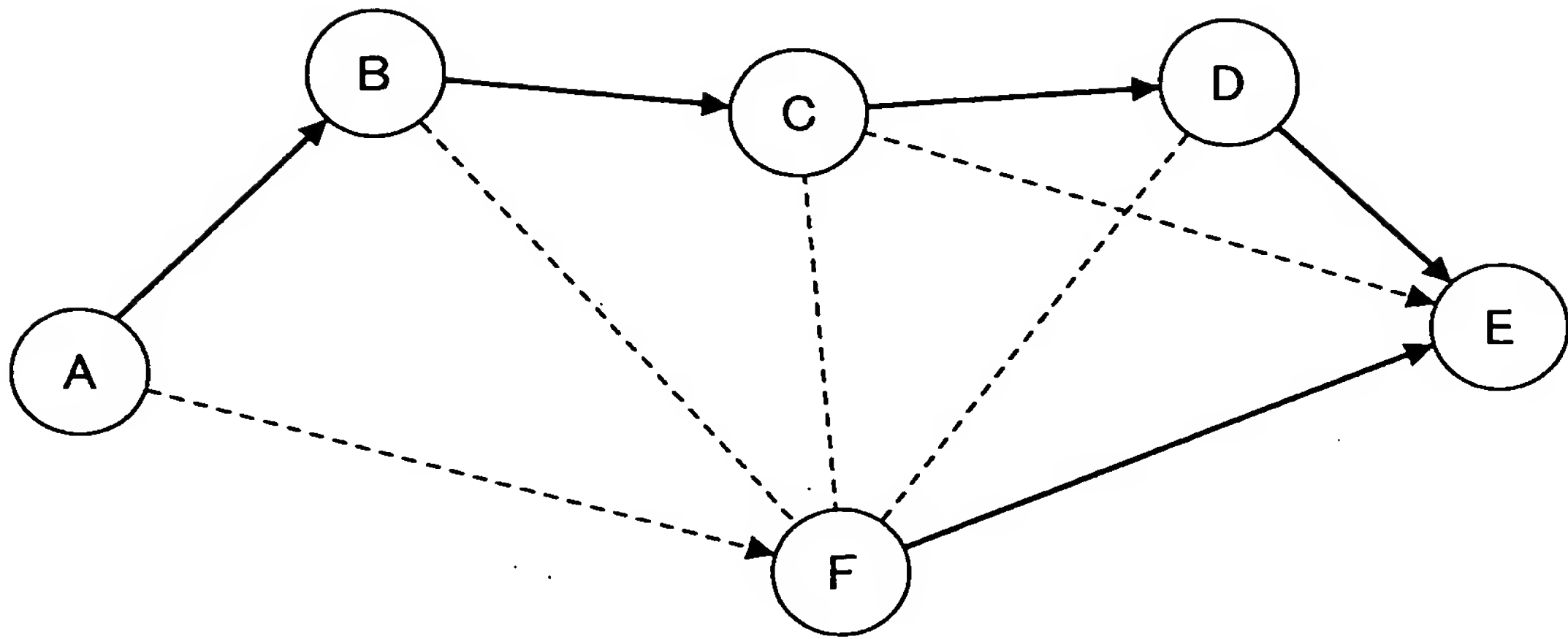


FIG.21A

DESTINATION	ROUTE
A	—
B	B
C	B → C
D	B → C → D
E	F → E
F	F

FIG.21B

DESTINATION	ROUTE
A	-
B	B
C	B → C
D	B → C → D
E	B → C → D → E
F	F

FIG.22A

DESTINATION	NEXT NODE
A	-
B	B
C	B
D	B
E	F
F	F

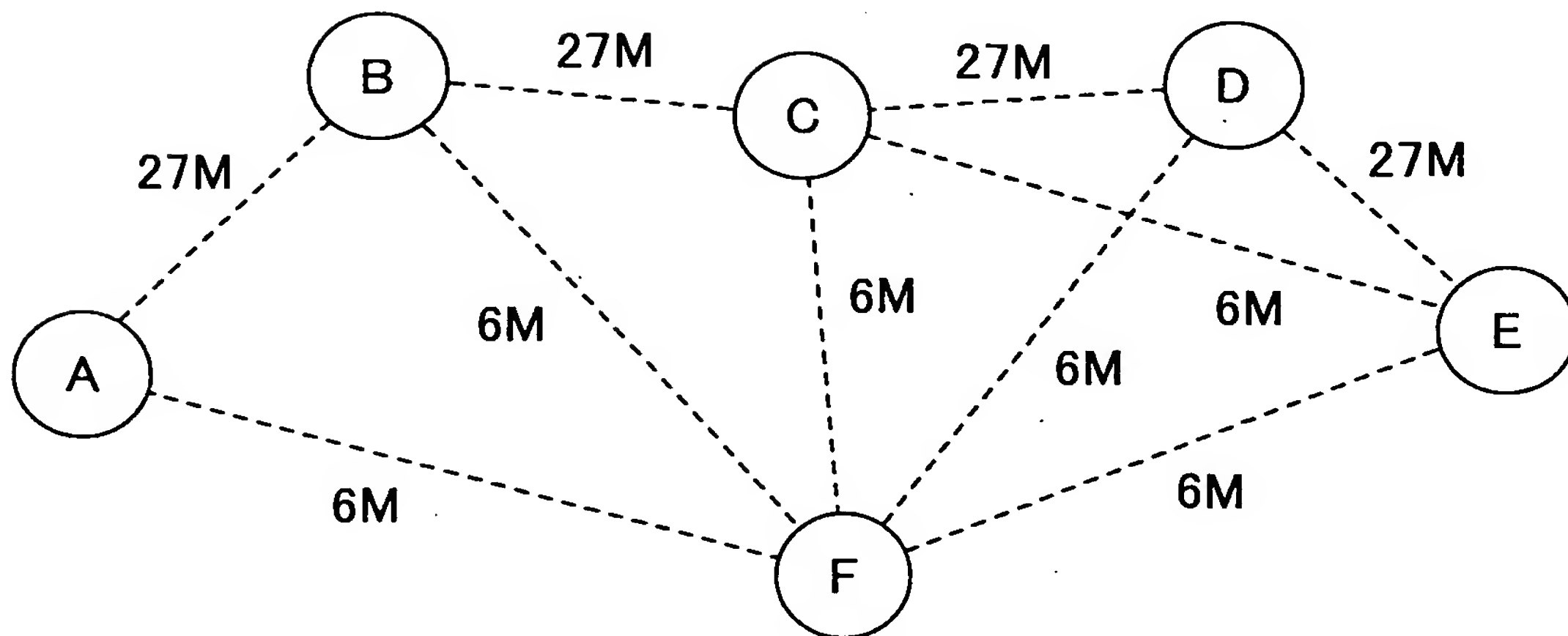
## FIG.22B

DESTINATION	NEXT NODE
A	—
B	B
C	B
D	B
E	B
F	F



FIG.23

1 : A→F→E  
 2 : A→B→C→E  
 3 : A→B→C→D→E



Cost1 = AF+FE=310+310=620  
 Cost2 = AB+BC+CE=189+189+310=688  
 Cost3 = AB+BC+CD+CE=756

Cost1 = AF+FE=1510+1510=3020  
 Cost2 = AB+BC+CE=454+454+1510=2418  
 Cost3 = AB+BC+CD+CE=454+454+454+454=1816